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REMARKS

These remarks follow the order of the paragraphs of the office action. Relevant portions of the office action are shown indented and italicized.

DETAILED ACTION

... For the reasons given above, rejections on claims 1-20 are maintained and analyzed as follow.

Applicants maintain their arguments previously made and repeated below.

However, in order to bring this application to allowance, claims 1, and 7 are amended and claim 21 is added. Claim 7 is a narrow claim having all the advantages of the present invention. It is anticipated that it would easily be recognized that it is allowable over any of the cited art. It includes specific and novel combination of steps for net browsing. Even if each individual step would be known, which applicants maintain they are not, a new combination of known elements is allowable, especially in as much as it results in the advantages described in the specification.

Claim 21 is a very narrow claim protecting the specific embodiment broadly described in the specification.

Claim Rejections -35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 7-9, 11-12, 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanigawa et al. (US 5,973,681).

Regarding claim 1, Tanigawa discloses a method for browsing the Web on the Internet, comprising using a browserless broadcast system (see figures 1-2, col. 19, lines 7-43, col. 20, lines 50-67, col. 28, line 61-col. 29, line 11), which includes:

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1 In response, the applicants respectfully state that exception is taken with the comparison of the
2 elements of claim 1 and the art of Tanigawa as stated in the office communication above. A
3 review of Tanigawa fails to show that claim 1 reads on Tanigawa. It is not contestable that many
4 similar components and elements for receiving, transmitting and displaying are used in
5 Tanigawa, these are used functionally in different ways than as used in claim 1. Besides, claim 1
6 is further amended to bring the application to allowance quickly. Claim 1 as amended reads:

7 1. A method for browsing the Web on the Internet, comprising using a browserless
8 broadcast system which includes:

9 providing a transmitting unit for compressing video data in accordance with a
10 predetermined compression scheme and transmitting the compressed data;

11 and providing a receiving unit for receiving and decoding the transmitted video data and
12 directly transmitting the data to a video display device, the method further comprising the
13 steps of:

14 converting a web page transmitted to the transmitting unit from the Internet into video
15 data;

16 compressing the video data in accordance with the predetermined compression scheme;

17 transmitting the compressed video data;

18 receiving and decoding the transmitted video data using the receiving unit to directly
19 transmit the decoded data to a video display device, without requiring a browser
20 application; and

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1 establishing an association between a link provided to the video data and a position of a
2 cursor in the video data transmitted to the video display device by comparing a position
3 coordinate of the cursor with coordinates of points included in area links linked to other
4 web pages and the like.

5 In order to anticipate a claim the reference must anticipate and have all the elements of the claim.
6 Tanigawa fails to anticipate all the elements of claim 1. The cited portions of Tanigawa fail to
7 show that "[T]anigawa discloses a method for browsing the Web on the Internet, comprising
8 using a browserless broadcast system (see figures 1-2, col. 19, lines 7-43, col. 20, lines 50-67,
9 cot. 28, line 61-col. 29, line 11)," as alleged in the office communication. There is no indication,
10 reference or concern shown for browserless browsing in Tanigawa Figures 1-2, col. 19, lines
11 7-43, col. 20, lines 50-67, cot. 28, line 61-col. 29, line 11. Tanigawa Figures 1-2, are described
12 in Tanigawa column 6, as "FIG. 1 is a block diagram showing the structure of the data
13 communication system 100 of the first embodiment of the present invention," and "FIG. 2 shows
14 an example file list 200 stored in the file list storing unit 121." A review of Tanigawa Figs 1 and
15 2 shows that Tanigawa doesn't have "a receiving unit for receiving and decoding the transmitted
16 video data and directly transmitting the data to a video display device." Tanigawa doesn't allude
17 to the direct transmission of video data from a receiving device to a video display device.

18 Applicants fail to understand the relevance of the cited portions [copied below] of Tanigawa's
19 multiplexing technique to the elements of claim 1. Tanigawa col. 19, lines 7-43, reads;

20 "The multiplexing unit 115 multiplexes the display image information (including the
21 audio information) and the link information read by the transmission data reading unit
22 114, and outputs multiplexed data to the transmitting unit 116. Here, this multiplexing
23 can be performed using the same method as conventional teletext broadcasting. In such a
24 case, display image information and audio information are multiplexed in the same way
25 as the images and audio included in conventional TV broadcasts, while link information
26 is multiplexed in the same way as the text information multiplexed with teletext
27 broadcasts. This in to say, when no audio information is present, the display image
28 information is transmitted in the image section of one frame of the television image
29 signal, while the link information is transmitted in the retrace section of the same one
30 frame of the television image signal. When audio information is present, the audio
31 information is transmitted as the television audio signal, while the corresponding display

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1 image information and link information are transmitted in the image area and retrace area,
2 respectively, of the television image signal for the number of frames required by the
3 reproduction of the audio information;

4
5 The transmitting unit 116 successively transmits the transmission data which has been
6 multiplexed by the multiplexing unit 115 on a TV broadcast ground wave.

7
8 Transmission Method for the Transmission Data

9
10 FIG. 11A gives a graphic representation of the transmission method used by the
11 transmitting unit 116. FIG. 11A shows the case when n pages (n being a positive integer)
12 of transmission data are generated by the transmission data generating unit 112. In FIG.
13 11A, a pairing of audio information and display image information with a same
14 identification number is expressed as one transmission unit corresponding to a normal TV
15 broadcast, and the link information for the same identification number is expressed as one
16 transmission unit corresponding to the text information which is multiplexed into a
17 standard teletext broadcast.

18 Applicants also fail to see how this is relevant to the elements of claim 1.

19 Tanigawa col. 20, lines 50-67, reads:

20 The symbols "V1, A1, L1" in the transport stream represent the display image
21 information, audio information, and link information which have the identification
22 number "0001" and which are read from the transmission data file and multiplexed
23 together. This is also the case for "V2, A2, L2" . . . "Vn, An, Ln". "V1" is a video
24 elementary stream which shows the display image information which has been converted
25 into I (Intra) pictures under MPEG2 standard, with the PID (Packet Identifier) "0x0100"
26 having been attached to identify the stream. This is also the case for "V2" . . . "Vn".

27
28 "A1" is an audio elementary stream which shows the audio information which has been
29 converted under MPEG2 standard, with the PID "0x0101" having been attached to
30 identify the stream. This is also the case for "A2" . . . "An".

31
32 "L1-Ln" are private sections according to MPEG2 standard for attaching each set of link
33 information, with the PID "0xB0" having been attached to identify these as private

34 Applicants fail to see how this is regarding Tanigawa's audio elementary stream, etc., is relevant
35 to the elements of claim 1.

36 Also, Tanigawa col. 28, line 61-col. 29, line 11, reads:

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1 The present embodiment describes the case when in order to display WWW home pages
2 on the Internet, the data communication system 100 uses a one-to-many TV broadcast to
3 is perform simulated bidirectional communication, so that when compared to the case
4 when home pages are displayed by a browser on a personal computer, the display of the
5 user's desired pages on the display unit 154 can be performed at a high speed which is
6 unaffected by congestion. Since display image information is sent in a conventional TV
7 format, the display of full color, high-resolution images can easily be achieved by the
8 display unit 154. Also, while the display or display images generated by a browser for
9 display on a TV monitor does not make full use of the components, such as the
10 reproduction processing for display images, conventionally provided inside a TV, the
11 present embodiment can achieve simulated bidirectional communication which makes
12 full use of circuitry, such as memory and decoders, conventionally provided inside a TV
13 set.

14 Applicants fail to see how this one to many specific technique is relevant to the elements of claim
15 1.

16 Also, applicants respectfully state that exception is taken with the office communication
17 statement that Tanigawa anticipates:

18 *"establishing an association between a link provided to the video data and a position of a*
19 *cursor in the video data transmitted to the video display device (e.g. see include, but is*
20 *not limited to, figures 18a-20, col. 23, lines 30-37, col. 24, lines 46-50, col. 25, lines*
21 *5-18, col. 26, lines 17-52)."*

22 A review of the Tanigawa cited portions fails to show any concern of Tanigawa of any
23 association between a link provided to the video data and a position of a cursor. Tanigawa,
24 indeed fails to teach a step of "establishing an association between a link provided to the video
25 data and a position of a cursor in the video data transmitted to the video display device."
26 Tanigawa certainly fails to disclose an association established "by comparing a position
27 coordinate of the cursor with coordinates of points included in area links linked to other web
28 pages and the like." Thus claim 1 and all claims that depend on claim 1 are allowable over the
29 reference.

30 *a transmitting unit for compressing video data in accordance with a predetermined*
31 *compression scheme and transmitting the compressed data (transmission data*
32 *generating, transmitting data holding unit, transmitting data reading unit, multiplexing*
33 *unit, transmitting unit- hereinafter referred to as transmitting unit-compressing video*
34 *data in MPEG-2 for transmitting over digital satellite broadcasting to the receiving*
35 *apparatus 150 - see include, but is not limited to, figure 1, col. 20, lines 12-67);*

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1 Applicants review the many references of Tanigawa and fail to see the alleged teaching in these
2 portions of the present claims:

3 Tanigawa col. 20, lines 12-67 reads:

4 The multiplexing unit 115 has also been described as multiplexing the display image
5 information (including the audio information) and the link information which are
6 generated by the transmission data generating unit 112, with the transmitting unit 116
7 transmitting the transmission data which has been multiplexed by the multiplexing unit
8 115 on a TV broadcast ground wave, although the display image information and link
9 information do not need to be multiplexed together for transmission. As one example, the
10 display image information and the audio information may be transmitted on a TV
11 broadcast ground wave or as a digital satellite broadcast, while the link information may
12 be transmitted using a telephone link and modem, or the like. Transmission here may
13 alternatively be performed using multiple channels..
14

15 When digital satellite broadcasting is used as the data transmission method,
16 compression/encryption and multiplexing may be performed according to MPEG2
17 (Moving Pictures Experts Group) video standard and system standard, so that display
18 image information may be set as I pictures, with the audio a information and link
19 information being set as private information. Here, when it is possible for the display
20 image information, audio information, and link information to be transmitted as digital
21 data, it is no longer necessary to write a graphic representation of the identification
22 number into the non-displayed area of the display image information, so that the
23 identification number can be simply appended to the display image information and audio
24 information, in the same way as with the link information. Incidentally, a detailed
25 description of MPEG2 standard is given in "Saishin MPEG Kyoukasho [Latest MPEG
26 Reader]" published by ASCII Publishing, Inc.
27

28 FIG. 11B shows the multiplexed stream which is transmitted when digital satellite
29 broadcasting is used. The upper part of this drawing shows a transport stream under
30 MPEG2 standard which has been generated by the multiplexing unit 115.
31

32 The symbols "V1, A1, L1" in the transport stream represent the display image
33 information, audio information, and link information which have the identification
34 number "0001" and which are read from the transmission data file and multiplexed
35 together. This is also the case for "V2, A2, L2" ... "Vn, An, Ln". "V1" is a video
36 elementary stream which shows the display image information which has been converted
37 into I (Intra) pictures under MPEG2 standard, with the PID (Packet IDentifier) "0x0100"
38 having been attached to identify the stream. This is also the case for "V2" ... "Vn".
39

40 "A1" is an audio elementary stream which shows the audio information which has been
41 converted under MPEG2 standard, with the PID "0x0101" having been attached to
42 identify the stream. This is also the case for "A2" ... "An".
43

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"L1-Ln" are private sections according to MPEG2 standard for attaching each set of link information, with the PID "0xB0" having been attached to identify these as private sections. Here, identification numbers are also set in the table ID extensions to identify separate sets of link information. Each of these sets of link information is set at least one pairing of one part of the image area of the corresponding display image and information showing a link to another display image. An one example, in "L1", the display area centered on the coordinates (X,Y)=(100,600) is set the link "GOTO.sub.-- PAGE:(0002)" representing a link to the display image with the identification number "0002", while the display area centered on the coordinates (X,Y)=(10, 700) is set the link "GOTO.sub.-- PAGE(0003)" representing a link to the display image with the identification number "0003".

The correspondence between the PIDs described above and the identification numbers is set according to the PMT (Program Map Table) under MPEG2 standard. Here, the correspondence between the PIDs and the identification numbers can be written in the descriptors of the private sections, such as by setting the identification numbers as the component tags in the PMT, as shown in FIG. 11B.

In the above case, the video elementary stream, audio elementary stream, and private

Thus, a review of these sometimes lengthy reference fails to teach the elements of the present claims. It continues:

and a receiving unit for receiving and decoding the transmitted video data and directly transmitting the data to a video display device (e.g., separating unit, received data holding unit, reproducing unit, and control unit, process the received MPEG-2 and transmitted the processed signal directly to display unit 154 for display (see include, but are not limited to, figure 1, col. 23, line 53-col. 25, line 18. Since the data is received in encoded MPEG-2 (col.20, lines 28-34), the received MPEG-2 data must be decoded before it is displayed), the method comprising the steps of:

col.20, lines 28-34 reads:

When digital satellite broadcasting is used as the data transmission method, compression/encryption and multiplexing may be performed according to MPEG2 (Moving Pictures Experts Group) video standard and system standard, so that display image information may be set as I pictures, with the audio a information and link information being set as private information. Here, when it is possible for the display image information, audio information, and link information to be transmitted as digital data

In response the applicant respectfully states the action continues:

converting a web page transmitted to the transmitted unit from the Internet into video data (e.g., converting page information into image data,

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1 *control information, and supplementary design information see include, but is not*
2 *limited to; col. 3, lines 1-15, col. 11, lines 60-67);*

3 col. 3, lines 1-15 reads:

4 With the above construction, page information received from an external source can be converted
5 into image data, control information, and supplementary design information which indicates a
6 combining of supplementary designs for each set of image data, these sets of data being suited to
7 broadcasting

8
9 Here, the obtaining unit may obtain the page information from the World Wide Web on the
10 Internet.

11
12 With the above construction, the transmitting apparatus can convert HTML documents on
13 WWW servers on the Internet into image data, control information, and supplementary design
14 information which it then broadcasts. As a result, the transmitting apparatus can provide users
15 with an interactive program which resembles "net surfing" on the Internet using only a TV
16 broadcast wave.

17 The action continues:

18 *compressing the video data in accordance with the predetermined*
19 *compressing scheme (comprising the display image data, audio, link information,*
20 *into MPEG-2 for broadcasting - col. 20, lines 13-44);*

21 col. 20, lines 13-44 reads:

22 multiplexing the display image information (including the audio information) and the link
23 information which are generated by the transmission data generating unit 112, with the
24 transmitting unit 116 transmitting the transmission data which has been multiplexed by the
25 multiplexing unit 115 on a TV broadcast ground wave, although the display image information
26 and link information do not need to be multiplexed together for transmission. As one example,
27 the display image information and the audio information may be transmitted on a TV broadcast
28 ground wave or as a digital satellite broadcast, while the link information may be transmitted
29 using a telephone link and modem, or the like. Transmission here may alternatively be performed
30 using multiple channels.

31
32 When digital satellite broadcasting is used as the data transmission method,
33 compression/encryption and multiplexing may be performed according to MPEG2 (Moving
34 Pictures Experts Group) video standard and system standard, so that display image information
35 may be set as I pictures, with the audio a information and link information being set as private
36 information. Here, when it is possible for the display image information, audio information, and
37 link information to be transmitted as digital data, it is no longer necessary to write a graphic
38 representation of the identification number into the non-displayed area of the display image
39 information, so that the identification number can be simply appended to the display image
40 information and audio information, in the same way as with the link information. Incidentally, a
41 detailed description of MPEG2 standard is given in "Saishin MPEG Kyoukasho [Latest MPEG
42 Reader]" published by ASCII Publishing, Inc.

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1 The action continues:

2 *transmitting the compressed video data (transmitted the MPEG-2 stream*
3 *including video stream, display image information, audio stream, audio*
4 *information, and link information, etc.— see include, but are not limited to, col.*
5 *20, lines 13-67, figures 1, 11B);*

6 col. 20, lines 13-67 reads:

7 The multiplexing unit 115 has also been described as multiplexing the display image information
8 (including the audio information) and the link information which are generated by the
9 transmission data generating unit 112, with the transmitting unit 116 transmitting the
10 transmission data which has been multiplexed by the multiplexing unit 115 on a TV broadcast
11 ground wave, although the display image information and link information do not need to be
12 multiplexed together for transmission. As one example, the display image information and the
13 audio information may be transmitted on a TV broadcast ground wave or as a digital satellite
14 broadcast, while the link information may be transmitted using a telephone link and modem, or
15 the like. Transmission here may alternatively be performed using multiple channels.

16
17 When digital satellite broadcasting is used as the data transmission method,
18 compression/encryption and multiplexing may be performed according to MPEG2 (Moving
19 Pictures Experts Group) video standard and system standard, so that display image information
20 may be set as I pictures, with the audio a information and link information being set as private
21 information. Here, when it is possible for the display image information, audio information, and
22 link information to be transmitted as digital data, it is no longer necessary to write a graphic
23 representation of the identification number into the non-displayed area of the display image
24 information, so that the identification number can be simply appended to the display image
25 information and audio information, in the same way as with the link information. Incidentally, a
26 detailed description of MPEG2 standard is given in "Saishin MPEG Kyoukasho [Latest MPEG
27 Reader]" published by ASCII Publishing, Inc.

28
29 FIG. 11B shows the multiplexed stream which is transmitted when digital satellite broadcasting
30 is used. The upper part of this drawing shows a transport stream under MPEG2 standard which
31 has been generated by the multiplexing unit 115.

32
33 The symbols "V1, A1, L1" in the transport stream represent the display image information, audio
34 information, and link information which have the identification number "0001" and which are
35 read from the transmission data file and multiplexed together. This is also the case for "V2, A2,
36 L2" . . . "Vn, An, Ln". "V1" is a video elementary stream which shows the display image
37 information which has been converted into I (Intra) pictures under MPEG2 standard, with the
38 PID (Packet IDentifier) "0x0100" having been attached to identify the stream. This is also the
39 case for "V2" . . . "Vn".

40
41 "A1" is an audio elementary stream which shows the audio information which has been
42 converted under MPEG2 standard, with the PID "0x0101" having been attached to identify the
43 stream. This is also the case for "A2" . . . "An".
44

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"L1-Ln" are private sections according to MPEG2 standard for attaching each set of link information, with the PID "0xB0" having been attached to identify these as private sections. Here, identification numbers are also set in the table ID extensions to identify separate sets of link information. Each of these sets of link information is set at least one pairing of one part of the image area of the corresponding display image and information showing a link to another display image. An one example, in "L1", the display area centered on the coordinates (X,Y)=(100,600) is set the link "GOTO.sub.-- PAGE:(0002)" representing a link to the display image with the identification number "0002", while the display area centered on the coordinates (X,Y)=(10, 700) is set the link "GOTO.sub.-- PAGE(0003)" representing a link to the display image with the identification number "0003".

The correspondence between the PIDs described above and the identification numbers is set according to the PMT (Program Map Table) under MPEG2 standard. Here, the correspondence between the PIDs and the identification numbers can be written in the descriptors of the private sections, such as by setting the identification numbers as the component tags in the PMT, as shown in FIG. 11B.

In the above case, the video elementary stream, audio elementary stream, and private

The action continues:

receiving and decoding the transmitted video data using the receiving unit to directly transmit the decoded data to a video display device, without requiring a browser application (receiving and processing the transmitted MPEG-2 using separating unit, received data holding unit, reproducing unit, control unit, signal receiving and transmitted the processed data to display unit 154 for display see include, but is not limited to, figure 1, col. 20, lines 13-67, col. 23, line 50-col. 24, line 50, col. 28, line 47-col. 29, line 11; the MPEG-2 data must be decoded before it is displayed. Since the receiving apparatus does not have a browser (discussed in " to Argument" above), the processed data is directly transmitted to the display unit without requiring a browser application).

col. 20, lines 13-67 reads as stated above.

col. 23, line 50-col. 24, line 50 reads:

The following is an explanation of the components of the data receiving apparatus 150, with reference to FIGS. 16 to 20.

Structure of the Separating Unit 151

The separating unit 151 includes a read buffer 161 for reading the identification number allotted to transmission data. The read buffer 161 has storage areas for temporarily holding the display image information (including audio information) included in one transmission file and the link information included in one transmission file.

The separating unit 151 separates display image information (including audio information) and

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1 link information from the received transmission data, and stores the separated display image
2 information and link information in the corresponding storage areas of the read buffer 161. The
3 identification number assigned to the display image information stored in the storage area is read
4 by recognizing the image written in the predetermined part of the non-displayed area of the
5 display image information. The identification number assigned to the link information is read in
6 the same manner as when reading an identification number assigned to a conventional digital
7 data file. If the read identification number is the identification number designated by the control
8 unit 155, the display image information (including audio information) or the link information
9 held by the read buffer 161 is stored in the corresponding storage area in the received data
10 holding unit 152. At this point, any audio information which is present is stored by the separating
11 unit 151 in a corresponding storage area provided in the received data holding unit 152 at the
12 same time as the display image information is stored, so that the audio information is gradually
13 accumulated while the display image information with the identification number designated by
14 the control unit 155 is repetitively transmitted. By doing so, audio information which is
15 transmitted across a plurality of frames can be separated from the transmission data.

16
17 If the read identification number is not the identification number designated by the control unit
18 155, the display image information (including audio information) or its link information held by
19 the read buffer 161 is discarded. The reading of new display image information (including audio
20 information) and link information is continued, and the above procedure is repeated until the
21 identification number designated by the control unit 155 is detected.

22
23 Structures of the Received Data Holding Unit 152, the Reproducing Unit 153

24 col. 28, line 47-col. 29, line 11 reads:

25 As described above, in the present embodiment the display image information, which
26 conventionally would have had to have been generated by the data receiving apparatus 150 while
27 the data receiving apparatus 150 is interpreting the control information, is generated and
28 transmitted by the data transmitting apparatus 110, which reduces the load of each data receiving
29 apparatus 150. Also, when compared with the large number and variety of display control
30 processes for display character strings which were conventionally written into the control
31 information, the link information of the present embodiment contains a smaller number and less
32 variety of control processes. As a result, simulated bidirectional communication can be easily
33 achieved by the data receiving apparatuses 150 using this link information.

34
35 The present embodiment describes the case when in order to display WWW home pages on the
36 Internet, the data communication system 100 uses a one-to-many TV broadcast to perform
37 simulated bidirectional communication, so that when compared to the case when home pages are
38 displayed by a browser on a personal computer, the display of the user's desired pages on the
39 display unit 154 can be performed at a high speed which is unaffected by congestion. Since
40 display image information is sent in a conventional TV format, the display of full color,
41 high-resolution images can easily be achieved by the display unit 154. Also, while the display or
42 display images generated by a browser for display on a TV monitor does not make full use of the
43 components, such as the reproduction processing for display images, conventionally provided
44 inside a TV, the present embodiment can achieve simulated bidirectional communication which

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1 makes full use of circuitry, such as memory and decoders, conventionally provided inside a TV
2 set.

3 In response the applicants respectfully take continued exception with the office communication
4 allegations of the teaching of claim 1 elements by Tanigawa. The action continues:

5 *Tanigawa further discloses link information including image link, web page link, etc. and*
6 *position of cursor (e.g., position coordinate of the icon, cursor/supplemental design, etc.*
7 *are provided in the multiplexed signal (see include, but are not limited to, col. 3, lines*
8 *1-30, col. 4, lines 1-13, col. 5, lines 5-9, lines 56-67, col. 10, lines 36-67, col. 12, lines*
9 *15-30, col. 20, line 50-col. 21, line 12).*

10 Tanigawa col. 3, lines 1-30 reads:

11 With the above construction, page information received from an external source can be
12 converted into image data, control information, and supplementary design information
13 which indicates a combining of supplementary designs for each set of image data, these
14 sets of data being suited to broadcasting
15

16 Here, the obtaining unit may obtain the page information from the World Wide Web on
17 the Internet.
18

19 With the above construction, the transmitting apparatus can convert HTML documents on
20 WWW servers on the Internet into image data, control information, and supplementary
21 design information which it then broadcasts. As a result, the transmitting apparatus can
22 provide users with an interactive program which resembles "net surfing" on the Internet
23 using only a TV broadcast wave.
24

25 Here, the determining unit may determine a headline as the specified image part, and the
26 generating unit may generate supplementary design combining information which
27 indicates a combining of the specific image part with a supplementary design for bold
28 display.
29

30 With the above construction, the transmitting apparatus can detect the headline written in
31 an HTML document on a WWW server on the Internet and can generate supplementary
32 design combining information indicating a combining of the supplementary design at an
33 image position of the headline. The receiving apparatus receives this supplementary
34 design combining information and combines a supplementary design, which is made up
35 of a frame which surrounds the title of the image data, with the image data to emphasize
36 the title of the image data.

37 Tanigawa col. 4, lines 1-13 reads:

38 system using a broadcast wave, wherein the broadcast wave is produced by multiplexing
39 a plurality of frames of image data, and control information which includes image link
40 information for each frame of image data showing links with other frames or image data

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1 and supplementary design combining information indicating the combining of a
2 supplementary design with the plurality of frames of image data, the broadcast wave
3 being repeatedly transmitted, and the supplementary design being combined with an
4 image of the image data, wherein the receiving apparatus includes: a separating unit for
5 separating a frame of image data and corresponding control information from the
6 broadcast wave; a supplementary design storage unit for storing at least one
7 col. 5, lines 5-9 reads:

8 combines the supplementary design, which is a frame which surrounds the title of the
9 display image, with the image data to emphasize the title.

10
11 Here, the classification may indicate one of a character and image to which a link has
12 been attached as the specific image part and the supplementary design specifying unit
13 may specify a supplementary design which shows that the specific image part has an
14 attached link to other image data.

15
16 With the above construction, the transmitting apparatus receives supplementary design
17 combining information and combines the supplementary designs showing links to other
18 image data at the positions of characters or images which are linked to other sets of image
19 data, so that the characters or images which are linked to other sets of image data are
20 emphasized in the display.

21 Thus applicants respectfully state that these fail to show anticipation of claim 1. Thus, claim 1
22 and all claims that depend on claim 1 are allowable over Tanigawa.

23 *Regarding claim 2, Tanigawa discloses a method as discussed in the rejection of claim 1.*
24 *Tanigawa further discloses converting a web page comprises providing the link to the*
25 *video data on the basis of a link provided to the web page (e.g., providing link such as*
26 *link web page, or html page, etc. to video data, display image or video stream, or MPEG*
27 *stream based on link (e.g., link to tokyo.html, link to weather.au, or link to*
28 *www.wbc.com, etc., provided in the web page - see include, but is not limited to, figures*
29 *7-10, col. 10, line 23-col. 11, line 67, col. 12, lines 15-42), the step of transmitting the*
30 *compressed video data comprises transmitting the compressed video data and*
31 *information about the link (transmitting the video data comprising transmitting MPEG-2*
32 *including video stream, display image, link information, audio information, etc. - see*
33 *figures 1, 11B, col. 18, line 38-col. 19, line 43, col. 20, line 13-col. 21, line 30).*

34 In response, the applicants respectfully state that a review of the figures and referenced lines of
35 Tanigawa fails to show that Tanigawa even alludes to a step of converting a web page by
36 "providing the link to the video data on the basis of a link provided to the web page," and a step
37 of transmitting that includes transmitting the compressed video data and information about the

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1 link." Tanigawa apparently doesn't transmit information about the link. Thus claim 2 is
2 allowable over the cited art for itself and also because it depends on allowable claim 1.

3 *Regarding claim 3, Tanigawa discloses a method as discussed in the rejection of claim*

4 *1. Tanigawa further discloses providing a link to the video data comprising:*
5 *extracting a web address linked to the link provided to the web page (e.g. extracting*
6 *address/link information linked to "" page, "" page, or read the URL, etc. provided to*
7 *the web page— see include, but is not limited to, figures 2-10, col. 2, line 50-col. 3, line*
8 *8, col. 7, line 60-col. 9, line 61);*

9 *placing the link in the video data on the basis of the position of the link provided to the*
10 *web page (placing the link information including cursor position, page information,*
11 *coordinate, etc. in the multiplexed stream/ MPEG stream on the basis of the cursor*
12 *position of the link, or link information, etc. provided to the web page see include, but is*
13 *not limited to, figures 7-11b, col. 2, line 50-col. 3, line 8; col. 8, lines 30-64, col. 10, lines*
14 *1-67, col. 12, lines 15-30, col. 13, lines 35-62, col. 20, line 13-col. 21, line 18).*

15 In response, the applicants respectfully state that Tanigawa's "FIG. 3 shows the HTML document
16 301 "Report.html" which is the first page of a home page provided by a WWW server." Also,
17 Tanigawa refers to "Tokyo.html"

18 '` TOKYO `' on line 319 of FIG. 3 indicates that the
19 character string "TOKYO" is linked to the HTML document 501 "Tokyo.html" which is
20 shown in FIG. 5.

21 This apparently does not anticipate a "step of providing a link to the video data," that includes
22 "extracting a web address linked to the link provided to the web page; and placing the link in the
23 video data on the basis of the position of the link provided to the web page," as in claim 3. Thus
24 claim 3 is allowable over the cited art for itself and also because it depends on allowable claim 1.

25 *Regarding claim 4, Tanigawa discloses a method as discussed in the rejection of claim 2.*
26 *Tanigawa additionally discloses the step of receiving and decoding the transmitted video*
27 *data comprises:*

28 *decoding the received data (the received MPEG-2 data must be decoded before it is*
29 *displayed -discussed in rejection of claim 1 above);*

30 *transmitting the decoded data to the video display device (transmitting decoded data to*
31 *display unit 154 —figure 1, col. 24, lines 36-51);*

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1 *establishing an association between the information about the link provided to the*
2 *received video data and a position of a cursor in the video data transmitted to the video*
3 *display device (see discussion in the rejection of claim 1 above).*

4 In response, the applicants respectfully state that exception is taken with the comparison of the
5 elements of claim 4 and the art of Tanigawa as stated in the office communication above. A
6 review of Tanigawa fails to show that claim 4 reads on Tanigawa. The cited portions don't have
7 or allude to a combination of steps for decoding the received data, transmitting the decoded data
8 to the video display device; and establishing an association between the information about the
9 link provided to the received video data and a position of a cursor in the video data transmitted to
10 the video display device. Thus claim 4 is allowable over the cited art for itself and also because
11 it depends on allowable claim 1.

12 *Regarding claim 5, Tanigawa discloses a method as discussed in the rejection of claim 1.*
13 *Tanigawa also discloses video data includes audio data when web page include voice or*
14 *sound (broadly interpreted as the multiplexed MPEG-2 includes audio data, when web*
15 *page include audio information (e.g., weather.au) see include, but is not limited to,*
16 *figures 2-3, 11b, .col. 9, lines 34-39, col. 18, lines 45-59, col. 17, lines 30-42, col. 18,*
17 *lines 38-44, col. 19, lines 7-31, col. 20, lines 50-63, col. 21, line 53-57).*

18 In response, the applicants respectfully state that exception is taken with the comparison of the
19 elements of claim 5 and the art of Tanigawa as stated in the office communication above. A
20 review of Tanigawa fails to show that claim 5 reads on Tanigawa. Exception is taken with the
21 broad interpretation. Tanigawa doesn't allude to video data that includes "audio data when said
22 web page includes voice or sound." Thus claim 5 is allowable over the cited art for itself and
23 also because it depends on allowable claim 1.

24 *Regarding claim 7, Tanigawa discloses a method as discussed in the rejection of claim 1.*
25 *Tanigawa further discloses the predetermined compression scheme is an MPEP2*
26 *standard (col. 20, lines 28-67).*

27 In response, the applicants respectfully state that exception is taken with the comparison of the
28 elements of claim 7 and the art of Tanigawa as stated in the office communication above. A
29 review of Tanigawa fails to show that claim 7 regarding browserless browsing reads on
30 Tanigawa. Thus claim 7 is allowable over the cited art for itself and also because it depends on
31 allowable claim 1.

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Moreover, claim 7 is amended to protect a particular embodiment of the present invention and resulting with all its advantages. It is certainly allowable over Tanigawa.

Regarding claims 8-9, 11-12, the limitations of the broadcast system as claimed correspond to the limitations of the method as claimed in claims 1, 3, and are analyzed as discussed with respect to the rejection of claims 1, 3, 5, 7.

In response, the applicants respectfully state that as with method claim 1, exception is taken with the comparison of the elements of apparatus claims 8-9, 11-12 and the art of Tanigawa as stated in the office communication above. A review of Tanigawa fails to show that claims 8-9, 11-12 read on Tanigawa. This is particularly so, with the narrowing of claim 8 to include "means for establishing an association between the link provided to the video data and a position of a cursor in the video data transmitted to the video display device by comparing a position coordinate of the cursor with coordinates of points included in area links linked to other web pages and the like." Thus claim 8 and all claims that depend on claim 8 are allowable over the reference.

Regarding claims 16-18, the method as claimed is broader in scope than the method as claimed in claims 1-3, and are analyzed as discussed in the rejection of claims 1-3.

In response, the applicants respectfully state that as with method claim 1, exception is taken with the comparison of the elements of apparatus claims 16-18 and the art of Tanigawa as stated in the office communication above. A review of Tanigawa fails to show that claims 16-18 read on Tanigawa. All the remarks regarding the non-anticipation of Tanigawa of claim 1, are similarly applicable to claim 16. This is particularly so, with the narrowing of claim 16 to include "establishing an association between a link provided to the video data and a position of a cursor in the video data transmitted to the video display device by comparing a position coordinate of the cursor with coordinates of points included in area links linked to other web pages and the like." Thus claim 16 and claims 17-20 that depend on claim 16 are allowable over the reference.

Claim Rejections -35 USC ~ 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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1 (a) A patent may not be obtained though the invention is not identically disclosed or described as set
2 forth in section 102 of this title, if the differences between the subject matter sought to be patented and the
3 prior art are such that the subject matter as a whole would have been obvious at the time the invention was
4 made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall
5 not be negated by the manner in which the invention was made.

6 5. Claims 13-15, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over
7 Tanigawa et al. (US 5,973,681).

8 Claims 13-15, 19-20 are directed toward embody the method of claims 1, 8, 16 in "
9 readable medium" or "storage device readable by machine" or "program product" It
10 would have been obvious to embody the procedures of Tanigawa as discussed with
11 respect to claims 1, 8, 16 in a "readable medium" or "storage device readable by
12 machine" or "program product" in order that the instructions could be automatically
13 performed by a processor.

14 In response, the applicants respectfully state that exception is taken with the comparison of the
15 elements of claims 13-15, 19-20 and the art of Tanigawa as stated in the office communication
16 above. A review of Tanigawa fails to show that claims 13-15, 19-20 are made obvious by
17 Tanigawa. Claims 13-15, 19-20 are Beauregard computer type claims. The office
18 communication apparently indicates that there is no place or need for Beauregard computer type
19 claims because of obviousness. It should be very much appreciated that Beauregard computer
20 type claims have special protective value of the invention to the assignee. Tanigawa apparently
21 makes no illusion to Beauregard computer type claims. In some inventions Beauregard computer
22 type claims are appropriate and in some these are not. Thus claims 13-15, 19-20 are allowable
23 over the cited art, each for itself and also because each depends on an allowable claim.

24 6. Claims 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over
25 Tanigawa et al. (US 5,973,681) as applied to claim 4 or claim 8 above, and in view of
26 Mao et al. (US 7,089,579 B1).

27 In response, the applicants respectfully state that apparently claims 6 and 10 are not made
28 obvious by the combination of Tanigawa and Mao. It was shown above that Tanigawa doesn't
29 allude to browserless browsing, which are an integral part of claims 6 and. The cited art to Mao,
30 US Patent 7,089,579, filed December 6, 1999, is entitled: "System for transporting MPEG video
31 as streaming video in an HTML web page". The Mao abstract reads:

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1 "An implementation of streaming video in HTML (Hypertext Markup Language) Web
2 pages combines video signals in MPEG digital television format with Internet World
3 Wide Web pages in HTML format. Internet streaming video is transcoded into MPEG-2
4 digital video format and multiplexed along with other MPEG-2 digital video signals for
5 transport within a multiple channel digital video system. A navigational control map,
6 transmitted from the headend to the CATV set-top box in a fixed location in the MPEG-2
7 video data stream, permits the CATV set-top to find the requested video clip in a
8 predetermined Packet Identifier of the MPEG-2 data stream. The viewer controls the
9 video clip (e.g., play, pause, resume, restart etc.) during the session. In the two-way
10 embodiment, the set-top transmits control commands to the headend, which implements
11 the command in MPEG-2 video. The disclosed arrangement allows the available
12 MPEG-2 decoder hardware in the CATV set-top box to be used to display streaming
13 video without requiring additional hardware or additional RAM memory".

14 Thus Mao is concerned with streaming video in HTML. Mao is not concerned with browserless
15 browsing as claims 6 and 10. There is apparently no reason to combine Mao in US Class
16 725/109, with Tanigawa in US Class 345/327, except in an attempt to find a combination that
17 allegedly makes claims 6 and 10 obvious. Since, there apparently is no reference in the cited art
18 of one to another, it is a use of hindsight to try to find a combination for the elements of claims 6
19 and 10. This is not allowed in an obviousness rejection. Thus claims 6-10 are allowed over the
20 combination.

21 *Regarding claim 6, Tanigawa discloses a method as discussed in the rejection of claim 4.*
22 *Tanigawa also discloses the link is selected by the user, and bidirectional communication*
23 *(see include, but is not limited to, col. 27, line 19-col. 29, line 32). However, Tanigawa*
24 *does not explicitly disclose sending link information to the transmitting unit when any*
25 *one link provided to the data transmitted to the video display is selected.*

26 *Mao discloses sending link information to the transmitting unit when the link provided to*
27 *the data transmitted to the video display is selected (see col. 8, lines 5-67, figures 1, 4).*
28 *Therefore, it would have been obvious to one of ordinary skill in the art at the time*
29 *the invention was made to modify Tanigawa to use the teaching as taught by Mao in*
30 *order to improve efficiency in transmitting of content that is not stored at the receiving*
31 *device.*

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1 *Regarding claim 10, the additional limitations of the system as claimed correspond to the*
2 *additional limitations of the method as claimed in claim 6, and are analyzed as discussed*
3 *with respect to the rejection of claim 6.*

4 In response, the applicants respectfully state that exception is taken with the comparison of the
5 elements of claim 1 and the art of Tanigawa and Mao as stated in the office communication
6 above. A review of Tanigawa failed to show that claim 4 reads on Tanigawa. Mao col 8, 5-67,
7 reads:

8 "The operation of a two-way CATV system embodying the present invention is illustrated
9 in the timing diagram of FIG. 4. The system consists of four computing entities. At the
10 headend there is an application manager 464 (102 in FIG. 1), a two way IP/MPEG server
11 466 (106 in FIG. 1) and a video stream server 468 (108 in FIG. 1). The set-top 470 (126
12 in FIG. 1) is at the viewer (user) location. In FIG. 4, various messages are exchanged
13 between the four computing entities 464, 466, 468, 470.

14
15 In operation, a Web page from the Internet is cached by the application manager 464,
16 forwarded 450 to the two way IP/MPEG server 466 and transmitted 451 over the CATV
17 system (HFC) to the CATV set-top 470. In the two-way embodiment, Web pages are
18 transported using the DVB standard for TCP/IP over MPEG cable See section 7 of the
19 European Broadcasting Union DVB specification EN 301 192 v1.1.1, published by the
20 European Standards Institute (1997) for a description of the TCP/IP over MPEG cable
21 standard. However, the Web page 450 may also be broadcast as part of a rotating carousel
22 of HTML Web pages, as more fully described in the above cited pending patent
23 application.

24
25 When the user selects a URL representing streaming video in the Web page being
26 viewed, the selected URL is transmitted 452 back to the application manager 464 in a
27 session request. Return path transport is standard TCP/IP over MPEG cable. The
28 application manager establishes a communication (COM) session and sends a message
29 454 to the video stream server 468 which transmits a video control map 456 to the set-top
30 470. The video control map 456, also called the Session Information Table, or SIT, is
31 broadcast in a predetermined PID of the MPEG-2 data stream, and addressed to a specific
32 set-top 470 by the tableIDext field. That is, all set-tops use the same PID to transport the
33 control map (SIT) but use the tableIDext field to filter out the right address. At
34 substantially the same time or shortly thereafter, regular MPEG-2 video 458
35 corresponding to the requested video clip is transmitted to the set-top 470.

36
37 The URL in the session request 452 represents streaming video. If the application

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1 manager 464 has not recently cached streaming video for the URL in the session request
2 at the headend, the Internet access server (proxy server 118 in FIG. 1) retrieves the
3 desired streaming video from the designated URL on the Internet. The added or updated
4 streaming video for that URL is cached in the proxy server, transcoded into MPEG-2
5 video format and stored in the application manager 464. The proxy server and the
6 application manager 464 operate to cache streaming video at the headend, thus storing
7 Internet streaming video content closer to the user.

8
9 The viewer at the set-top box 470 location controls the play of the video clip by selecting
10 (clicking on) an action control icon, such as PLAY, PAUSE, RESUME etc. The viewer's
11 control action is transmitted back 460 to the application manager 464, which modifies the
12 running status of the COM session to reflect the viewer's selected control action. In
13 accordance with the new running status, the application manager 464 sends a new
14 communication (COM) message 461 to the video stream server 468 which transmits a
15 modified SIT control map 462 to the set-top 470. For example, from the SIT table
16 definition below, if PAUSE was selected, the running status is change to equal 4
17 (PAUSE). "

18 A review of this portion indicates use of some similar words but not functionally as in claims 6
19 and 10.

20 Mao fails to help Tanigawa to teach or make obvious steps or means for "sending link
21 information to the transmitting unit when any one link provided to the data transmitted to the
22 video display device is selected; and transmitting a web page linked to the selected link from the
23 Internet to the transmitting unit," as in claims 6 and 10.

24 Thus claims 6 and 10 are allowable over the cited art, each for itself and also because each
25 depends on an allowable claim.

26 As stated above, in order to bring this application to allowance, claims 1, and 7 are amended and
27 claim 21 is added.

28 Claim 7 is a narrow claim having all the advantages of the present invention. It is anticipated
29 that it would easily be recognized that it is allowable over any of the cited art. It includes
30 specific and novel combination of steps for net browsing. Even if each individual step would be
31 known, which applicants maintain they are not, a new combination of known elements is
32 allowable, especially in as much as it results in the advantages described in the specification.

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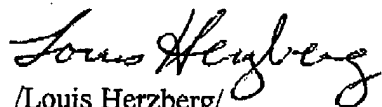
1 Claim 21 is a narrow claim of a special embodiment of the present invention. It is a combination
2 of elements not taught previously.

3 It is anticipated that this amendment shows that all claims 1-21 are allowable. If any question
4 remains, please contact the undersigned.

5 Please charge any fee necessary to enter this paper to deposit account 50-0510.

6

Respectfully submitted,



7
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